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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/830,150

04/23/2004

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1081.1202

7843

21171 7590 03/03/2008
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EXAMINER

MARTINEZ, DAVID E

ART UNIT

PAPER NUMBER

2181

MAIL DATE

DELIVERY MODE

03/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/830,150

Applicant(s)

IZAWA ET AL.

Examiner

DAVID E. MARTINEZ

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/29/07 has been entered.

Request for Interview Response

Numerous attempts were made to schedule the requested interview (voicemails were left on 2/7/08 and 2/12/08 to schedule the requested interview at the earliest convenience). Matthew H. Polson (Reg. No. 58,841) replied to the voicemails on 2/22/08 and agreed to file an written agenda/outline for approval before the scheduling of the interview by 2/25/08 which was never received. Because of the lack of response to the requested agenda/outline, the case has been examined as follows.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to disclose a computer-readable medium storing a control program which is claimed for claims 17-18.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2181

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said apparatus" in line 18. There is insufficient antecedent basis for this limitation in the claim. Also, in line 19, the term "a financial transaction operation" renders the claim indefinite since it is not clear if the term is a new instance of a financial transaction operation or if it's supposed to be referring back to the financial transaction operation shown in line 4 of the claim.

Claim 9 recites the limitation "said apparatus" in line 16. There is insufficient antecedent basis for this limitation in the claim. Also, in lines 14-15, the term "a financial transaction operation" renders the claim indefinite since it is not clear if the term is a new instance of a financial transaction operation or if it's supposed to be referring back to the financial transaction operation shown in line 2 of the claim.

Claim 17 recites the limitation "said apparatus" in line 14. There is insufficient antecedent basis for this limitation in the claim. Also, in line 13, the term "a financial transaction operation" renders the claim indefinite since it is not clear if the term is a new instance of a financial transaction operation or if it's supposed to be referring back to the financial transaction operation shown in lines 3-4 of the claim.

Claim 20 recites the limitation "The automatic transaction control *method* according to claim 1" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 1 refers to an automatic transaction apparatus.

With regards to dependent claims 2-8, 10-16, and 18-20, they suffer from the same deficiencies and their respective parent claims and thus are rejected under the same rationale.

Due to the vagueness and a lack of clear definiteness in the claims, the claims have been treated on their merits as best understood by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-11, 15-17 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 7,024,668 to Shiomi et al. (hereinafter Shiomi).

1. With regards to claim 1. Shiomi teaches an automatic transaction apparatus [fig 15 element 11 is a network interface that is connected to a remote transaction apparatus not shown – column 7 lines 39-44] for communicating with a host [fig 15 element 30] and performing a transaction operation according to a operation of a customer [column 14 lines 12-20], comprising:

a plurality of I/O units for performing said transaction operation [fig 15 elements 35b1, 35b2];
and

a control unit [fig 15 elements 33, 34, 35] controlling one of said I/O units [fig 15 elements 35b1, 35b2] according to first transaction control signals from said host [column 14 lines 12-29, element 30 is the application execution apparatus that uses control signals to execute an operation for an application], and wherein said control unit comprises:

a middleware layer [fig 15 element 33] operating according to control of a kernel [fig 15 element 34a] and controlling one of said plurality of I/O units [fig 15 elements 35b1, 35b2];

Art Unit: 2181

a parameter file storing to convert said first transaction control signals, which are a common type to all apparatus connected to said host and specified by an interface with said host into second transaction control signals specific to said middleware layer [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36], and

an I/O control layer [fig 15 elements 33, 34] converting the said first transaction control signals, into said second transaction control signals specific to said middleware layer by referring to said parameter file, and operating said middleware layer based on said second transaction signals [column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36], and wherein said middleware layer [fig 15 element 33] specific to said apparatus [fig 15 element 11] controls said I/O units [fig 15 elements 35b1, 35b2] so as to perform a financial transaction operation designated by said first transaction signals, according to said second transaction signals [column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

2. With regards to claim 2, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein:

said I/O control layer [fig 15 elements 33, 34] further comprises a plurality of I/O control libraries [fig 3 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b] corresponding to each of said plurality of I/O units [fig 15 elements 35b1, 35b2]; and

said I/O control layer calls up one of said plurality of I/O control libraries according to the first transaction control signals from said host, reads parameters corresponding to one of said

Art Unit: 2181

plurality of I/O control libraries from said parameter file, edits said second transaction control signals specific to said middleware layer using the parameters, and operates said middleware layer [fig 15 element 33 operates inside the middleware layer, column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

3. With regards to claim 3, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said middleware layer comprises:

an I/O client layer intermediating third transaction control signals to one of said plurality of I/O units [fig 15 element 33a, column 14 lines 21-29];

an I/O server layer starting and ending an I/O operation and controlling the communication protocol by said third transaction control signals of said I/O client layer [fig 15 element 33b, column 14 lines 43 to column 15 line 21]; and

an I/O service provider layer converting messages with each of said plurality of I/O units [fig 15 element 33c, column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

4. With regards to claim 7, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said I/O control layer renders logical the reply from one of said plurality I/O unit and forwards it to said host [column 15 lines 32-46 providing a resource to the application (the application being the interface card connected to the host)].

5. With regards to claim 8, Shiomi teaches the automatic transaction apparatus according to claim 7, wherein;

one of said plurality of I/O units is an I/O unit handling a medium [column 18 lines 28-36];
and

said I/O control layer renders logical the reply regarding said medium from said I/O unit, and forwards it to said host [column 15 lines 32-46 providing a resource to the application (the application being the interface card connected to the host)].

Art Unit: 2181

6. With regards to claims 9 and 17, they directed to the method and computer-readable medium storing a program, implemented by claim 1 above and thus are rejected under the same rationale.

7. With regards to claim 10, it is directed to the method implemented by the automatic transaction apparatus of claim 2 above and thus is rejected under the same rationale.

8. With regards to claim 11, it is directed to the method implemented by the automatic transaction apparatus of claim 3 above and thus is rejected under the same rationale.

9. With regards to claim 15, it is directed to the method implemented by the automatic transaction apparatus of claim 7 above and thus is rejected under the same rationale.

10. With regards to claim 16, it directed to the method implemented by the automatic transaction apparatus of claim 8 above and thus is rejected under the same rationale.

11. With regards to claim 19, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said I/O control layer converts said first transaction control signals comprised of first common commands for said financial transaction into said second transaction control signals comprised of second commands and parameters specific to said middleware [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

12. With regards to claim 20, Shiomi teaches the automatic transaction control method according to claim 1, wherein said converting comprises converting said first transaction control signals comprised of first common commands for said financial transaction into said second transaction control signals comprised of second commands and parameters specific to said middleware [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1,

Art Unit: 2181

34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

13. With regards to claim 22, it is directed to an automatic transaction apparatus having its features disclosed in claim 1 above and thus it is rejected under the same rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,024,668 to Shiomi et al. (hereinafter Shiomi). in view of US Patent Application Publication No. US 2004/0131082 A1 to Evans et al. (hereinafter Evans).

14. With regards to claim 4, Shiomi is silent as to the automatic transaction apparatus according to claim 1, wherein said plurality of I/O units implement cash transactions based on said operation of the customer, however, Evans teaches using a plurality of I/O units which implement cash transactions based on an operation of a customer [paragraphs 4, 6 and figs 2 and 3] for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously [paragraph 4] and being able to access data stored in different types of I/O units when performing a transaction [paragraph 6].

It would have been obvious to combine the teachings of Shiomi and Evans to have said plurality of I/O units implement cash transactions based on said operation of the customer

Art Unit: 2181

for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously and being able to access data stored in different types of I/O units when performing a transaction [Evans paragraph 6].

15. With regards to claim 5, Shiomi teaches the automatic transaction apparatus according to claim 1, wherein said I/O control layer receives said first transaction control signals from said host which follow transaction sequence specified by said customer, operates one of said plurality of I/O units, and returns a reply to said host [column 15 lines 32-46], but he is silent as to the transaction sequence being a cash transaction sequence. However, Evans teaches the use of a cash transaction sequence for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously and being able to access data stored in different types of I/O units when performing a transaction [paragraphs 4 and 6].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Shiomi and Evans to have the transaction sequence be a cash transaction sequence for the benefit of meeting the needs of an enterprise by operating numerous distinct computing platforms simultaneously and being able to access data stored in different types of I/O units when performing a transaction [Evans paragraphs 4 and 6].

16. With regards to claim 12, it is of the same scope as claim 4 above and thus is rejected under the same rationale.

17. With regards to claim 13, it is of the same scope as claim 5 above and thus is rejected under the same rationale.

Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,024,668 to Shiomi et al. (hereinafter Shiomi). in view of Applicant's Admitted Prior Art (hereinafter AAPA).

Art Unit: 2181

18. With regards to claim 6, Shiomi is silent as to the automatic transaction apparatus according to claim 1, wherein said control unit further comprises a browser for communicating with said host on the Web and exchanging said first control signals specified by the interface between said I/O control layer and said host. However, AAPA teaches a control unit comprises a browser for communicating with the host on the web and exchanging control signals specified by the interface between an I/O control layer and the host for the benefit of being able to communicate with the host over the web to perform transactions from any location [fig 27, AAPA disclosed in the instant application in section "Description of Related Art"].

It would have been obvious to one of ordinary in the art at the time of the invention to combine the teachings of Shiomi and AAPA to have a browser for communicating with said host on the Web and exchanging said first control signals specified by the interface between said I/O control layer and said host for the benefit of being able to communicate with the host over the web to perform transactions from any location [fig 27, AAPA disclosed in the instant application in section "Description of Related Art"].

19. With regards to claim 14, it is of the same scope as claim 6 above and thus is rejected under the same rationale.

Response to Arguments

Applicant's arguments filed 11/29/07 have been fully considered but they are not persuasive.

With regards to Applicant's arguments directed to the 102 rejection of claims 1, 9 and 17 in pages 8-10, the Examiner respectfully disagrees.

In response to Applicant's arguments that the prior art of record fails to disclose "financial transactions", the Examiner would like to note that the prior art of record discloses transactions as noted in the prior final office action, and that the "financial" limitation is not

Art Unit: 2181

structurally involved in the elements of the apparatus. Therefore, the amended "financial" limitation is deemed to be nonfunctional descriptive material. The elements of the apparatus would be the same regardless of what type of transaction is being performed. Furthermore, logging into a bank site can be a financial transaction when doing some kind of monetary allocation of some kind to an account, also, the request for a balance also construes a "financial transaction" without the call for a monetary allocation, and finally, merely accessing the bank site can construe a "financial transaction" by accessing data from a financial institution. The differences between the content of the Applicant's transaction and the prior art are merely subjective. Thus this nonfunctional descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see in re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed Cir. 1983); in re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed Cir. 1994) also see MPEP 2106.

In response to Applicant's arguments that the computer system and control signal disclosed by the prior art cannot correspond to the claimed automatic transaction apparatus and transaction signal, the Examiner respectfully disagrees. Applicant's cited text describes a computer system which conforms to an "automatic transaction apparatus", and bytecode which corresponds to a transaction signal. The prior art also shows the computer system performs a transaction, i.e., computer processing in which the computer responds to a request, which is implemented by the use of bytecode and binary code (first and second control signals). Furthermore, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant's arguments fail to specifically point out the differences between an automatic

Art Unit: 2181

transaction apparatus and the prior art's computer system, and also between a transactional signal and the prior art's control signal.

In response to Applicant's arguments that bytecode and binary code cannot correspond to the claimed first transaction control signal converted to a second transaction control signal, the Examiner respectfully disagrees. In computing, a transaction is nothing more than a type of computer processing in which a computer responds to a request. In contrast to Applicant's allegations, a first transaction control signal corresponding to bytecode is interpreted/converted into binary codes which corresponds to the claimed second transaction control signal in order to respond to a request which is clearly disclosed under the claim rejections above, "a parameter file storing to convert said first transaction control signals, which are a common type to all apparatus connected to said host and specified by an interface with said host into second transaction control signals specific to said middleware layer [parameters [fig 15 elements 33c1, 33c2 inside element 33c, and elements 34b1, 34b2 inside element 34b hold parameters which are used to convert bytecode (a first transaction control signals) to binary code (second transaction control signals) used by all apparatus connected to said host - column 14 lines 25-40, column 15 lines 32-46, column 18 lines 16-36].

Claims 4,5,12 and 13 remain rejected for similar reasons as claims 1, 9 and 17.

In response to applicant's argument that there is no suggestion to combine the references [remarks page 11 – regarding claims 6 and 14], the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the benefit is being

Art Unit: 2181

able to communicate with the host over the web to perform transactions from any location [fig 27, AAPA disclosed in the instant application in section "Description of Related Art"].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent Application Publication No. US 2005/0108164 A1 to Salafia, III et al. teaches making a transaction with a banking institution.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 272-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571/272-1000.

DEM


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